

CTE Standards Unpacking Digital Animation

Course: Digital Animation

Course Description: Digital Animation explores Legal and Ethical Issues, Career Opportunities, Use of Animations, Animation Software Tools, Basic Animation Techniques, Interactivity in Animation, and how to Publish Animated Movies.

Career Cluster: Arts, A/V Technology, Communications

Prerequisites: Recommended: Introduction To Arts/AV Technology &

Communications 11000

Program of Study Application: Digital Animation is a Level II pathway course in the Arts, A/V Technology & Communications career cluster that is appropriate for both the

Visual Arts and Telecommunications/AV Technology and Film pathways.

INDICATOR #DA 1: Develop an Awareness of Career Opportunities and Professionalism in Digital Animation

SUB-INDICATOR 1.1 (Webb Level: 2 Skill/Concept): Identify personal interests and abilities related to digital animation careers.

SUB-INDICATOR 1.2 (Webb Level: 2 Skill/Concept): Investigate career opportunities, trends, and requirements related to digital animation careers.

SUB-INDICATOR 1.3 (Webb Level: 3 Strategic Thinking): Demonstrate job skills for digital animation industries.

SUB-INDICATOR 1.4 (Webb Level: 3 Strategic Thinking): Explore legal and ethical issues related to digital animation

issues related to digital animation		
Knowledge (Factual):	Understand (Conceptual):	Do (Application):
-Employability skills.	-Protection of media users	-Self-assess personal
	and legal consequences.	interests and skills.
-Copyright and ethics		
laws specific to	-How personal interests and	-Identify personal
animation and design.	abilities influence careers in digital animation fields.	creative talents
-Career options available		-Identify.
locally, regionally and		technical/animation
worldwide.		talents.
-Digital animation career		-Research job
requirements.		opportunities.
requirements.		opportunities.
-Career skills required in		-Investigate trends
animation design		associated with digital
		animation.
		-Evaluate related career
		pathways.



	-Complete a web quest on legal issues related to digital animation.
	-Obtain formal permission for use of an art form, design, or photograph in an animation publication.

Benchmarks:

Students will be assessed on their ability to:

- Identify and match personal interests and skills to one or more careers in digital animation field.
- Evaluate and summarize how animation is used in product promotion.
- Display ability to work as part of a team and take direction from others.
- Investigate a legal issue involving graphic animation and identify copyright and ethics affected.

Academic Connections			
ELA Literacy and/or Math Standard (if applicable, Science and/or Social	Sample Performance Task Aligned to the Academic Standard(s):		
Studies Standard):			
RI.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	-Investigate a legal issue involving the career		
W.2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.	-Summarize use of animation		

INDICATOR #DA 2: Demonstrate Basic Digital Animation Skills

SUB-INDICATOR 2.1 (Webb Level: 3 Strategic Thinking): Understand Animation Development Process

SUB-INDICATOR 2.2 (Webb Level: 4 Extended Thinking): Create clips using animation software tools

SUB-INDICATOR 2.3 (Webb Level: 4 Extended Thinking): Implement a



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preproduct	tion p	nan

SUB-INDICATOR 2.4 (Webb Level: 4 Extended Thinking): Analyze and Critique Animation Production

Knowledge (Factual):

- -Steps required to develop animations.
- -Software tools and product need connections.
- -Preplanning animation creation.
- -Animation software tools.

Understand (Conceptual):

- -Why there is a process for animation development.
- -Different types of animation (e.g., frame, motion tween, shape tween, path).
- -Why animation requires timelines, story boarding and development.
- -How terminology is used in animation design (e.g., space created is called a stage; object, scene, skeletal structure)
- -Media may be published in a variety of formats.

Do (Application):

- -Develop a chart that explains each step of the animation development process.
- -Determine the number of drawings needed to animate a given situation.
- -Create drawings to illustrate the animation of a given situation such as picking up a pencil, taking a drink of water, lifting a weight.
- -Create and modify objects.
- -Change the color, size and shape of objects.
- -Use a vector tool to draw an object
- -Plan a theme premise and timeline.
- -Creating scenes.
- -Create a skeletal structure.
- -Develop a collection of examples for a variety of professionally designed animations.

Benchmarks:

Students will be assessed on their ability to:

Develop a plan and create one or more types of animation.



- Research a variety of animations and categorize according to type.
- Select at least three websites that integrate animation and evaluate the effectiveness of the animation

Academic Connections

ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):

W.2. Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.

W.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

Sample Performance Task Aligned to the Academic Standard(s):

-Develop an animation plan

-Evaluation of animation effectiveness

INDICATOR #DA 3: Employ Standard Convention for the Creation and Design of Animation Concepts

SUB-INDICATOR 3.1 (Webb Level: 4 Extended Thinking): Produce Basic Animation SUB-INDICATOR 3.2 (Webb Level: 4 Extended Thinking): Generate Audio in Animation

SUB-INDICATOR 3.3 (Webb Level: 4 Extended Thinking): Design User Interface/Interactivity in Animations

SUB-INDICATOR 3.4 (Webb Level: 4 Extended Thinking): Evaluate and analyze animations for publication

Knowledge (Factual):	Understand (Conceptual):	Do (Application):
-File formats for	-Basic types of animation.	-Use objects in
publishing animation.		animations.



- -Audio file format types.
- -Libraries and resources available for code snippets to create interactivity.
- -Event handlers and timeline controls
- -Difference between symbol and instance.
- -How to publish animations in a variety of formats.
- -Audio file conversion

- -Audio file formats and how to incorporate audio into timeline(s).
- -Creating process
- -Interactivity and how to use scripting and action scripting for creation.
- -Compare and contrast frame-by-frame animation vs a tweened animation.
- -Compare shape tweening vs motion tweening.
- -Create a motion guide.
- -Create a movie.
- -Select at least two animated movies and analyze the effectiveness of the use of sound in the movies.
- -Add a sound to a symbol and/or movie that you created.
- -Create an animated greeting card that includes instances of a symbol tweening, a motion guide and sound.
- -Compare the use of rollover and invisible buttons in animations.
- -Create a button symbol that can be used in an animated movie.
- -Use scripting to stop a movie from continuous looping.
- -Create a movie that incorporates action scripting to encourage viewer interactivity.



	-Research the publishing formats available for your animated movie.
	-Evaluate the publishing format for a specified end use of an animated movie.

Benchmarks:

Students will be assessed on their ability to:

- Create an interactive animation that meets specified criteria.
- Submit different types of interactive animation that uses event handlers.
- Identify and justify when and how symbol and instance should be used in animation.
- Publish animation(s) in a variety of file formats to be viewed in various applications.
- Incorporate audio in a multiple scene animation.

Academic (Connections	
ELA Literacy and/or Math Standard (if applicable, Science and/or Social Studies Standard):	Sample Performance Task Aligned to the Academic Standard(s):	
8.ET.CI.1. Students use technology to generate ideas and promote creativity.	-Promote a product or idea through animation creation.	
W.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.	-Use a variety of formats to publish animation	

Additional Resources

Please list any resources (e.g., websites, teaching guides, etc.) that would help teachers as they plan to teach these new standards.



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Graphic River

<u>Animaker</u>

Flikr Creative Commons

<u>Flikr</u>

Deviant Art

https://boinx.com/istopmotion/mac/

https://www.bloopanimation.com/flash-animation/ Adobe Animate CC